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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,156	12/18/2001	David E. Fredericksen	13477	5773

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ILLINOIS TOOL WORKS

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EXAMINER

PARKER, FREDERICK JOHN

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 12/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,156

Applicant(s)

FREDERICKSEN ET AL.

Examiner

Frederick J. Parker

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/17/02.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-6,8-11,14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leach in view of Smith.

References are cited for the same reasons previously discussed, which are incorporated herein. Applicants remarks have been carefully considered.

Applicants accurately state that they and the Examiner disagree as to teachings regarding preheat temperatures of Leach, specifically whether or not Leach teaches preheating above the cross-linking temperature of the coating material. While admitting the Examiner's position is "tenable", Applicants take the position that Leach teaches only heating the article above the curing temperature before coating because of a selected paragraph taken out of context on page 5, 54-59. In context, the reference teaches washing a substrate, preheating in an oven to a temperature at which a subsequently applied polymer coating "will melt and flow out upon contact with the [preheated] surface" and cause degassing to eliminate voids and defects. It further teaches the option to further preheat surfaces by IR, particularly the surfaces of large parts, apparently to reach or maintain the desired preheat

temperature of a large thermal mass object. Applicants' selected citation refers ONLY to using a second infrared to CURE powder already applied, NOT preheating. The reference to the second application of IR is in the context that a first auxiliary IR is used for preheating. It does not reasonably mean curing must occur during the first IR application, at least because (1) there is no statement stating as such, and (2) the reason for the first IR heating is expressly for auxiliary heating, as for large parts. Thus Applicants argument in context simply has not basis and is not persuasive.

Furthermore, the Applicants' implication that preheating causes curing would require the powder to rapidly polymerize and rigidize. Yet the overall goal of the method of Leach is to allow the powder to melt and flow out upon contact with the preheated surface and cause degassing to eliminate voids and defects. Applicants' interpretation would destroy both the spirit and express goal of the invention of Leach, and provide a part with a non-uniform, defect bearing coating. Applicants' interpretation of pages 7-8 are therefore without foundation and not persuasive.

With regard to the argument that there is no lower portion of the preheating range that is not within the subsequent curing range, the Examiner understands this interpretation, but notes that Leach also states (and Applicants recognize) "curing times and temperatures will vary somewhat depending on the powder coating composition". Thus, preheating is carried out at 250-350 F and curing is

Art Unit: 1762

taught "at least 250F, preferably 300-375 F", without limitation as to powder coating composition used. Given the criticality of having the powder coat melt and flow on the preheated substrate and then curing in a subsequent step, the ranges clearly permit, for example, a preheat of 300F to cause melting and flowing to form a uniform liquid coat, followed by curing at 375 F to harden the uniform coating. At best, the overlap raised by Applicants' argument leaves open the possibility that an article may be preheated to a given temperature to cause melt and flow, followed by a very long time at the same given temperature to cause cross-linking, on a composition where cross-linking is thermodynamically very sluggish at the given temperature, the overlap being simply a reflection of securing complete patent protection of Leach for such a possibility. Nothing explicitly teaches that preheat and curing temperatures must be identical for a given composition so that curing/ cross-linking occurs in both heating steps. Again, to do so would defeat the advantage of preheating to melt and flow to form a smooth uniform LIQUID coating, which would not be able to occur if hardening/ curing and cross-linking occurred. Thus while the Examiner understands Applicants' interpretation, it is his position that given the entirety of the teachings of Leach, Applicants' narrow interpretation of the prior art is not sustainable.

Applicants arguments are not persuasive and the rejections are maintained.

3. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leach in view of Smith and further in view of Anderson.

References are cited for the same reasons previously discussed, which are incorporated herein. Applicants do not separately argue these rejections; since the rejection of the independent claim is maintained, the rejections of claims 12-13 are accordingly maintained.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone

Application/Control Number: 10/025,156

Page 6

Art Unit: 1762

number is 703/308-3474. The examiner can normally be reached on Mon-Thur.
6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the
examiner's supervisor, Shrive Beck can be reached on 703/308-2333. The fax
phone number for the organization where this application or proceeding is
assigned is 703/305-5408.

Any inquiry of a general nature or relating to the status of this application
or proceeding should be directed to the receptionist whose telephone number
is 703/308-0661.



Frederick J. Parker
Primary Examiner
Art Unit 1762

fjp